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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

DISPATCHED

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| In the Matter of                               | ) |                       |
|  | ) | IB Docket No. 96-111  |
| Amendment of the Commission's Regulatory       | ) |                       |
| Policies to Allow Non-U.S.-Licensed Space      | ) |                       |
| Stations to Provide Domestic and International | ) |                       |
| Satellite Service in the United States         | ) |                       |
|  | ) |                       |
| and  | ) |                       |
|  | ) |                       |
| Amendment of Section 25.131 of the             | ) |                       |
| Commission's Rules and Regulations to          | ) | CC Docket No. 93-23 ✓ |
| Eliminate the Licensing Requirement for        | ) | RM-7931               |
| Certain International Receive-Only Earth       | ) |                       |
| Stations                                       | ) |                       |
|  | ) |                       |
| and  | ) |                       |
|  | ) |                       |
| COMMUNICATIONS SATELLITE                       | ) |                       |
| CORPORATION                                    | ) | File No. ISP-92-007   |
| Request for Waiver of Section 25.131(j)(1)     | ) |                       |
| of the Commission's Rules As It Applies to     | ) |                       |
| Services Provided via the Intelsat K           | ) |                       |
| Satellite                                      | ) |                       |

**NOTICE OF PROPOSED RULE MAKING**

Adopted: May 9, 1996

Released: May 14, 1996

Comment Date: July 15, 1996

Reply Comment Date: August 16, 1996

By the Commission: Commissioners Quello and Ness issuing separate statements.

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## I. INTRODUCTION

1. With this Notice, we propose a uniform framework for evaluating applications by users in the United States for authority to access satellites licensed by other countries. Under this framework, non-U.S.-licensed satellite systems<sup>1</sup> will generally be able to provide satellite services to, from, or within the United States to the extent that foreign markets allow effective competitive opportunities for U.S. satellite systems to provide analogous services. Although we have already allowed a wide range of services over non-U.S. satellite systems, such authorizations have been granted on an *ad hoc* basis. We anticipate that by formalizing our policy, we will facilitate much

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<sup>1</sup> Throughout this Notice, a "non-U.S." satellite system or operator is one that does not hold a commercial space station license from the Federal Communications Commission. By contrast, a "U.S." satellite system or operator is one whose space stations are licensed by the Commission. Because we concern ourselves primarily with a particular means of transmission (via satellite) rather than a particular type of service offering, the applicants who will be subject to the rules we propose may be satellite operators, earth station operators, video content providers, other service providers, users of satellite services, or some combination of these. We use all of these terms throughout the item, not to suggest that they are interchangeable but to suggest that our proposed rule is designed to apply to all of them.

greater access to non-U.S. satellites, thus benefitting users within the United States.<sup>2</sup> We will also encourage foreign governments to open their satellite communications markets, thereby enhancing competition in the global market for satellite services.

2. In implementing this policy, we will not require satellite systems already licensed by other countries to obtain redundant space station licenses from the United States. Rather, we propose to permit these systems access to the U.S. market by licensing earth stations to operate with non-U.S. satellite systems as we have done in the past.<sup>3</sup> We propose to authorize these earth stations for any service that falls within the scope of effective competitive opportunities for U.S. satellites abroad. This "effective competitive opportunities for satellites" or "ECO-Sat" test is similar to the "effective competitive opportunities" or "ECO" standard adopted in the Foreign Carrier Entry Order, but has been modified to address the unique characteristics of satellite services. Under our basic ECO-Sat framework, we will examine the "home market" of the non-U.S. satellite plus various "route markets" to which service from a U.S. earth station is proposed. In each such market, we will determine whether there are any *de jure* or *de facto* barriers to entry by U.S. satellite systems that seek to provide a service analogous to that which the non-U.S. satellite system proposes to provide to, from, or within the United States. Once an ECO-Sat determination has been made, we will consider, with appropriate guidance from the Executive Branch, whether there are any other public interest concerns that warrant prohibiting or allowing non-U.S. satellite systems to serve the U.S. market. Finally, to prevent interference to U.S. satellite systems and to facilitate responsible spectrum management in the United States, we propose to require all non-U.S. satellite systems serving the United States to comply with the technical and reporting requirements we impose on U.S. satellite systems.

## II. BACKGROUND

3. In response to explosive growth in the global telecommunications market, we have recently modified our rules to give both U.S. and foreign service providers greater flexibility to serve different geographic markets, while reducing regulatory burdens. In our Foreign Carrier Entry Order, we adopted a standard under which foreign carriers can enter the U.S. telecommunications market to provide international common carrier services. We decided to allow entry if effective competitive opportunities exist for U.S. carriers in the destination markets of dominant foreign

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<sup>2</sup> This Notice proposes to expand on policies and rules we have adopted in the past six months that allow foreign carriers into the U.S. communications market and permit U.S.-licensed satellite systems to provide both domestic and international services. See Market Entry and Regulation of Foreign-Affiliated Entities, Report and Order, 11 F.C.C. Rcd. 3873 (1995) ("Foreign Carrier Entry Order"); Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems, 11 F.C.C. Rcd. 2429 (1996) ("DISCO I"). DISCO is an acronym for Domestic International Satellite Consolidation Order.

<sup>3</sup> The granting of an earth station license would not eliminate the need for some earth station operators to obtain other authorizations, such as authorizations under Section 214 of the Communications Act of 1934, 47 U.S.C. § 214. Applications for such authority will be governed by existing rules and policies applicable to such cases, except that we discuss below whether Section 214 authority for MSS providers should be subject to the rules proposed herein. See section III.C.5, *infra*.

carriers seeking to enter the U.S. market.<sup>4</sup> The Foreign Carrier Entry Order, however, did not determine terms and conditions under which foreign satellite operators should be permitted to serve the U.S. market.<sup>5</sup> In that proceeding, we found the record insufficient to decide these issues, but stated that they would be addressed in the ongoing review of our domestic and international satellite policies.

4. We recently completed the first part of this review in DISCO I, where we eliminated the distinction between domestic and international fixed satellite services over U.S.-licensed satellite systems.<sup>6</sup> We determined that all U.S.-licensed satellites should be regulated under a uniform Separate Systems Policy, and we modified our Separate Systems Policy to allow all U.S. satellite systems to provide domestic service, international service, or both, according to their business judgment and their ability to obtain any needed approvals in foreign countries they wish to serve.<sup>7</sup> We extended this policy to U.S. satellite systems providing mobile satellite service ("MSS") and direct broadcast satellite ("DBS") service. This allows U.S. satellite systems, as well as their customers, to meet the challenges of a global economy without artificial and unnecessary U.S. regulatory constraints.

5. DISCO I did not, however, establish rules or criteria for satellite service in the United States over non-U.S. satellite systems. Consistent with our desire to provide U.S. customers with the widest possible range of service options, we had asked in the DISCO I Notice<sup>8</sup> whether and under what conditions non-U.S. satellite systems, including Intelsat and Inmarsat, should be permitted to provide U.S. domestic services. In the past, we have authorized the use of non-U.S. satellites to provide U.S. domestic services only upon a showing that existing U.S. domestic satellite capacity was

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<sup>4</sup> We also stated that we would employ the effective competitive opportunities test when deciding whether to permit foreign investment in the corporate parents of licensees of common carrier radio facilities in excess of the limits specified in section 310(b)(4) of the Act.

<sup>5</sup> Foreign Carrier Entry Order at ¶ 176.

<sup>6</sup> DISCO I, 11 F.C.C. Rcd. at 2440. See Letter from James L. Buckley, Under Secretary of State for Security Assistance, Science and Technology, to F.C.C. Chairman Mark Fowler (July 23, 1981) (printed in Appendix to Transborder Satellite Video Services, 88 F.C.C.2d 258, 287 (1981) (establishing our Transborder Policy); Establishment of Satellite Systems Providing International Communications, 101 F.C.C.2d 1046 (1985), recon., 61 R.R.2d 649 (1986), further recon., 1 F.C.C. Rcd 439 (1986) (establishing our Separate Systems Policy).

<sup>7</sup> DISCO I eliminated the Transborder Policy for U.S. satellite systems, but kept intact the application process for the use of non-U.S. satellite systems for service to or from the United States. The final rules adopted pursuant to this Notice will replace the remaining parts of the Transborder Policy as it applied to non-U.S. satellite systems.

<sup>8</sup> Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems, Notice of Proposed Rulemaking, 10 F.C.C. Rcd 7789 (1995) ("DISCO I Notice").

inadequate to satisfy specific service requirements.<sup>9</sup> No such showing has been required for international service over non-U.S. satellites. Instead, U.S. earth station operators have been authorized, on a case-by-case basis, to access non-U.S.-licensed satellites for service between the U.S. and specific foreign points based on the extent to which U.S.-licensed satellite systems may serve foreign markets.<sup>10</sup> A number of applications are currently pending for the provision of various services in the United States over non-U.S. satellite systems,<sup>11</sup> and we expect to receive such applications with increasing frequency in the future.

6. In response to the DISCO I Notice, we received a number of comments which generally favor allowing non-U.S. satellite systems to serve the domestic U.S. market, provided that U.S.-licensed systems are permitted to serve the foreign market of the non-U.S. licensed system.<sup>12</sup> Although no specific factors were proposed, many of the commenters suggested that the analysis should be similar to that developed in the Foreign Carrier Entry proceeding.<sup>13</sup>

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<sup>9</sup> See Letter from Bertram Rein, Deputy Assistant Secretary of Bureau of Economic and Business Affairs, U.S. Department of State, to Kenneth Williamson, Minister of Embassy of Canada (November 7, 1972). See also Letter from Thomas Tycz, Chief, Satellite and Radiocommunication Division, F.C.C. International Bureau, to Teresa Baer, Attorney, Latham & Watkins (February 13, 1996) (confirming verbal grant of special temporary authority for Hughes Communications Galaxy, Inc. to lease capacity from a Brazilian satellite to provide domestic U.S. service).

<sup>10</sup> See, e.g., Vision Accomplished, Inc., 11 F.C.C. Rcd. 3716 (1995); IDB Worldcom Services, Inc., et al., 10 F.C.C. Rcd. 7278 (Int'l Bur. 1995); AT&T et al., 8 F.C.C. Rcd. 2668 (Int'l Fac. Div'n 1993); IDB Communications Group, Inc., et al., 6 F.C.C. Rcd. 2932 (Com. Car. Bur. 1991).

<sup>11</sup> See, e.g., IDB Worldcom Services, Inc. Application File No. ITC-95-521 (filed September 12, 1995) (requesting authority to operate with a Russian-licensed satellite to provide international service); Caribbean Telephone and Telegraph, Inc. Application File No. ITC-95-549 (filed October 4, 1995) (requesting authority to operate with a Mexican-licensed satellite to provide international service); Telquest Ventures, L.L.C. Application file No. 758-DSE-P/L-96 & 759-DSE-L-96 (filed March 13, 1996) (requesting authority to operate with a Canadian-licensed DBS satellite to provide domestic and international service).

<sup>12</sup> See General Communication, Inc. Comments at 6 (filed June 8, 1995); Columbia Communications Corp. Comments at 11 (filed June 8, 1995); AT&T Corp. Comments at 15 (filed June 8, 1995); GE American Communications, Inc. Comments at 14 (filed June 8, 1995).

<sup>13</sup> AT&T Corp. Comments (filed June 8, 1995); Columbia Communications Corp. Comments (filed June 8, 1995); Hughes Communications Galaxy, Inc. (filed June 8, 1995); GE American Communications, Inc. Comments (filed June 8, 1995).

### III. DISCUSSION

#### A. Overview

7. Title III of the Communications Act of 1934 begins by stating a Congressional purpose "to maintain the control of the United States over all the channels of radio transmission."<sup>14</sup> Section 301 broadly prohibits radio communications within the jurisdiction of the United States "except under and in accordance with this Act and with a license in that behalf granted under the provisions of this Act."<sup>15</sup> Since the inception of satellite communications, we have recognized that communications satellites are a species of radio station -- a "space station" -- and we have regulated these space stations and the earth stations with which they communicate under Title III.<sup>16</sup> Whenever we license international radio communications, we are authorized by Section 308(c) to impose on such a license "any terms conditions, or restrictions"<sup>17</sup> that, among other things, would "assure just and reasonable rates and service" or "assist . . . in maintaining the rights or interests of the United States or its citizens in foreign countries."<sup>18</sup>

8. For many years, the primary objective of U.S. satellite policy has been to foster the greatest possible availability of efficient and innovative satellite communications services for users in the United States. Moreover, the Commission has almost always relied on competition among multiple private entities as the surest way to achieve this goal.<sup>19</sup> Our recent decision in DISCO I is philosophically in harmony with this long line of Commission decisions, in that it greatly expands the number of operators from whom U.S. users may buy international and domestic satellite services. Fair, vigorous competition among multiple providers leads to lower prices, better service, and more innovative service offerings for satellite communications users in the United States.

9. This same reasoning applies to competition from satellite systems licensed outside the United States. Just as U.S. users of both domestic and international satellite services will benefit from the increased competition made possible by DISCO I, so too will U.S. users benefit from greater access to non-U.S. satellites for both types of coverage. In addition, other countries are

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<sup>14</sup> 47 U.S.C. § 301.

<sup>15</sup> 47 U.S.C. § 301.

<sup>16</sup> See, e.g., Licensing of Space Stations in the Domestic Fixed-Satellite Service, 88 F.C.C.2d 318, 320 (1981).

<sup>17</sup> 47 U.S.C. § 308(c).

<sup>18</sup> An Act Relating to the Landing and Operation of Submarine Cables in the United States, Pub. L. No. 67-8, 42 Stat. 8 (1921) ("Submarine Cable Landing Act") (incorporated by reference into Section 308(c)).

<sup>19</sup> See, e.g., Establishment of Domestic Communications-Satellite Facilities by Non-Governmental Entities, 35 F.C.C.2d 844, 846-47 (1972) ("Open Skies"); Transborder Satellite Video Services, 88 F.C.C.2d 258, 277 (1981); Licensing of Space Stations in the Domestic Fixed-Satellite Service, 88 F.C.C.2d 318, 322 (1981); Establishment of Satellite Systems Providing International Communications, 101 F.C.C.2d 1046, 1064-68 (1985).

adopting policies that will condition market access for U.S. satellite operators on the availability of similar opportunities for non-U.S. satellite operators in the United States.<sup>20</sup> Thus, artificial entry barriers that exclude potential competitors from the U.S. satellite service market could very well result in less competition both here and abroad, making both U.S. users and U.S. satellite operators worse off than they would be under conditions of effective competition i.e., competition that is not dampened by entry barriers that apply to only some participants in the market. Our rules governing service from non-U.S. space stations should therefore represent an even-handed approach that allows the greatest degree of access to non-U.S. systems that is consistent with the public interest.

10. However, because non-U.S. satellite systems are, by definition, systems that operate without space station licenses from the United States, our framework for expanding their access to the U.S. market must include some mechanism for achieving the critical spectrum management goals that are normally served by our space station licensing process. For example, in order to determine the extent to which competing satellite operators may share frequencies within the same service area without interference, it is important that we have the same technical information about non-U.S. systems that we require from U.S. space station licensees. Similarly, it is important that our technical standards be observed by all the systems authorized to operate within the United States, regardless of which administration coordinates the space stations internationally. The United States must also have adequate assurance that interference can be prevented or remedied by any available means, including pre-launch coordination, modification of system coverage, or, in extreme cases, cessation of service -- all of which we can require of U.S. licensees.

11. In addition, there are circumstances under which unrestricted access to non-U.S. systems may adversely affect competition in the United States. For example, if a non-U.S. satellite can provide service on international routes that cannot be served by U.S. satellites, then the non-U.S. satellite will have a competitive advantage over its U.S. counterparts on all routes because it will be able to offer its customers a wider range of communications capabilities. To the extent any such advantage is based solely on the exclusion of U.S. satellite operators from markets overseas, it can distort competition in the market for international satellite services. Indeed, it is precisely this type of disparity in coverage that has long led this Commission to prohibit U.S. space station licensees engaged in international service from acquiring or enjoying any special concessions from foreign administrations concerning traffic to or from the United States that are unavailable to other U.S. licensees.<sup>21</sup> Similarly, if we permit United States domestic and international service from a non-U.S. satellite whose home market allows international but not domestic service over U.S. satellites, then the non-U.S. operator will be permitted to offer domestic service in both countries plus international service between the countries, while the U.S. operator can only offer two of these three service segments. Again in this case, the non-U.S. operator's more comprehensive service offerings could give it a competitive advantage over U.S. operators on all routes strictly by virtue of exclusionary

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<sup>20</sup> See, e.g., Federal Telecommunications Law (Ley Federal De Telecomunicaciones), Article 30, Diario Oficial June 7, 1995 (Mexico).

<sup>21</sup> See, e.g., Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Band, CC Docket No. 92-166, Memorandum Opinion and Order, FCC 96-54, ¶¶ 54-55 (released February 15, 1996); 47 C.F.R. § 25.143 (prohibiting U.S. satellite systems from entering into exclusive arrangements to serve particular countries).

policies abroad. And again, this is a situation we have historically tried to prevent within the U.S. satellite services market.<sup>22</sup>

12. These considerations -- the benefits of effective competition and open satellite communications markets, the need for responsible spectrum management, and the dangers of market distortions -- lead us to propose a legal framework that will permit non-U.S. systems to serve the United States on terms of competitive and regulatory parity with U.S.-licensed systems. Generally, we propose to continue using earth station licenses as the appropriate regulatory vehicles for authorizing access to non-U.S. space stations.<sup>23</sup> Once an earth station user submits an application to operate with a non-U.S. satellite system, we would conduct our broad public interest analysis by first applying our ECO-Sat test to determine whether the proposed service falls within the scope of effective competitive opportunities for U.S. satellite operators abroad. In addition, as in our Foreign Carrier Entry Order, we would also consider whether any additional countervailing public interest factors weigh in favor of a result different from the one we would reach under the ECO-Sat analysis alone. These factors would include spectrum availability and our spectrum management needs, as well as Executive Branch concerns regarding national security, law enforcement, foreign policy, and trade. We now proceed to discuss all the various elements of our proposal in detail.

B. Procedural Framework for Authorizing Access to Non-U.S. Satellites

13. Most satellite spectrum around the world is allocated on an "unplanned" basis, meaning that it can be used on a first come, first served basis by any administration so long as that administration's use does not interfere with the operation of a use that previously has been registered with the International Telecommunication Union ("ITU").<sup>24</sup> Each administration that proposes a new use of the spectrum has an obligation to coordinate with potentially affected administrations in order to ensure that no harmful interference will result. Conversely, each proposed use is coordinated by one and only one administration.<sup>25</sup> That administration has the responsibility to ensure that its systems operate in conformity with international spectrum allocations and applicable ITU regulations.

14. The United States is the coordinating administration for every space station licensed by the Commission. A space station that has already been coordinated outside the United States could conceivably obtain access to the U.S. market by requesting a space station license from the Commission. We do not believe, however, that the public interest would be served by requiring non-U.S. systems to obtain space station licenses from the United States before serving the U.S. market. For one thing, such licenses would be redundant, since ITU procedures call for each satellite to be

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<sup>22</sup> Our Transborder Policy permitted U.S.-licensed domestic satellites to provide limited international service to points within their footprints, and our original Separate Systems Policy prevented U.S.-licensed separate satellite systems from providing domestic service except on an ancillary basis.

<sup>23</sup> See, e.g., Vision Accomplished, 11 F.C.C. Rcd. 3716 (1995); IDB Worldcom Services, 10 F.C.C. Rcd. 7278 (1995).

<sup>24</sup> See Article 11 of the International Telecommunication Union Radio Regulations.

<sup>25</sup> As a result, with the possible exception of a few intergovernmental satellite organizations like Intelsat and Inmarsat, there is no difficulty in determining which country should be treated as the "home" country of a satellite operator.



registered and coordinated internationally by only one administration. In our view, duplicative licensing would be time-consuming and wasteful. In addition, many foreign administrations would understandably expect the United States to accept the sufficiency of satellite licensing procedures abroad -- as we expect them to accept the sufficiency of our procedures. We therefore tentatively conclude that we should regulate access to non-U.S. satellites primarily through the licensing of earth stations that communicate with these satellites. We seek comment on this conclusion.

15. Under our proposal, any earth station user or operator in the United States that wishes to send or receive transmissions over a non-U.S. satellite must apply for and receive a Title III license<sup>26</sup> to communicate with the non-U.S. satellite.<sup>27</sup> In processing that application, we would first apply the ECO-Sat test we propose below. We would then consider whether the other public interest factors described below support granting or denying the application. Earth station applications would thus become the procedural vehicle by which we prevent competitive distortions in the U.S. market and ensure responsible spectrum management.<sup>28</sup>

16. We anticipate that many, if not most, of the near-term requests to serve the United States will involve the use of operational geostationary satellites providing fixed services. In these cases, an earth station operator wishing to provide service need only file an earth station application and attach an ECO-Sat analysis.<sup>29</sup> The application will then be placed on public notice and action will be taken after the comment period has elapsed. In other cases, though, the only technically feasible way to accommodate multiple systems in the same band is to assign different frequencies to each system operating in the band. Because this initial assignment of frequencies may effectively foreclose later entry, market access for non-U.S. satellite operators would be illusory if it did not include the right to be considered as part of a processing round or other proceeding together with U.S. applicants. Similarly, in many satellite services, only a limited number of space stations can be authorized to serve the United States because of spectrum or other technical constraints. Consequently, a failure to participate in a processing group, the outcome of which will be to decide which companies will receive licenses, may preclude a non-U.S. system from later serving the United States even if it receives an orbital assignment from another administration. In order for non-U.S.

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<sup>26</sup> U.S. earth stations providing international service on a common carrier basis (via U.S. or non-U.S. satellite) must also continue to obtain a Section 214 authorization in accordance with Section 214 of the Communications Act and Part 63 of the Commission's rules. See 47 U.S.C. § 214 and 47 C.F.R. Part 63. See also Streamlining the International Section 214 Authorization Process and Tariff Requirements, IB docket No. 95-118, Report and Order, FCC 96-79 (released March 13, 1996) (establishing global 214 authorizations).

<sup>27</sup> We acknowledge that this differs somewhat from existing law on when an earth station license is required, and differs also from a 1993 proposal to revise our earth station rules for receive-only earth stations. We believe the earth station application process provides the best regulatory framework to address service by non-U.S. satellite systems. The 1993 proposal, and our reasons for departing from it, are explained in detail in section III.G, infra.

<sup>28</sup> We also propose minor modifications to our earth station application procedures to facilitate our ECO-Sat analysis and our spectrum coordinations with non-U.S. satellite systems.

<sup>29</sup> The allocation of the burden of production for the ECO-Sat analysis is discussed in section III.C.4, infra.

satellite operators to compete with U.S. operators for the opportunity to serve the U.S. market, we propose to consider such applications, under the ECO-Sat standard, contemporaneously with U.S. space station applications in the processing round or other proceeding. We will do so, however, only for a non-U.S. satellite system that meets one of the following three conditions: (1) the space station is in orbit and operating; (2) the space station has a license from another administration; or (3) the space station has been submitted for coordination to the ITU and is pursuing a license with another administration. Because we are not licensing foreign space stations, we do not need to coordinate the non-U.S. satellite internationally.

17. We anticipate that issues of mutual exclusivity will arise as more satellite systems seek to provide similar services and compete for the same frequencies. We propose to develop the rules or policies by which we select a licensee from mutually exclusive applicants at the time we develop service rules for a particular satellite service. We seek comment on all these proposals.

#### C. The ECO-Sat Test

18. We propose a basic ECO-Sat framework that focuses on the effective competitive opportunities for U.S. satellites in (1) the "home market" of each non-U.S. satellite; and (2) some or all of the "route markets" that the non-U.S. satellite seeks to serve from earth stations in the U.S. We seek comment on various ways in which these home and route markets might be identified. With respect to each of these markets, we propose to examine both *de jure* and *de facto* barriers to effective competition. We propose to conduct our analysis on a service-by-service approach, looking separately at competition in the markets for Fixed Satellite Services ("FSS"), Mobile Satellite Services ("MSS"), and Direct-to-Home satellite services ("DTH").

##### 1. Applications Subject to the ECO-Sat Test

19. Initially, we propose to apply the ECO-Sat test to all U.S. earth station applications involving transmissions to, from, or within the United States via a non-U.S. space station. We will apply the test regardless of ownership of the space station and regardless of the type of service offered. Thus, under our proposal an application to access a satellite licensed by Country X would be subject to the ECO-Sat test even if the satellite in question were substantially or even primarily owned by U.S. investors.

20. We tentatively conclude that we should not apply the policy that is ultimately adopted in this proceeding retroactively to review existing licenses and authorizations.<sup>30</sup> The potential disruption in service and the uncertainty that would be caused appear to outweigh any benefits that may result. We further tentatively conclude that we should not apply our new policy to applications, requests for special temporary authority, or any other requests that were properly filed before the date of adoption of this Notice.<sup>31</sup> If we were to apply the proposed policy to applications already on file, applicants who filed prior to the adoption of this Notice would need to make substantial amendments

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<sup>30</sup> However, once the policy proposed herein has been adopted, we will apply the policy to proposed expansions of authorized service.

<sup>31</sup> See, e.g. IDB Worldcom Services, 10 F.C.C. Rcd. 7278 (1995); Vision Accomplished, 11 F.C.C. Rcd. 3716, at ¶ 6 (1995).

to their applications to provide information requested by the new policy. We think this would be unfair and burdensome to the applicants, and might cause significant delays.

21. We propose that all applications filed after the adoption of this Notice be evaluated under, or made subject to, the final rules adopted in this proceeding. This will ensure fair and consistent treatment for all applicants. Applicants filing after the adoption of this Notice will have some notice of the policy to be adopted, making it fair to apply the policy to them. We seek comment on these conclusions.

## 2. Identifying the Appropriate National Market for Comparison

22. As noted above, the ITU coordination process ensures that there will be one country with which each authorized satellite can clearly be primarily identified: namely, the coordinating administration with the ITU. In applying our ECO-Sat standard, we tentatively conclude that as a general rule it is appropriate to look first at whether there are effective competitive opportunities for U.S. satellites in the coordinating administration's satellite service market: the "home market."<sup>32</sup> For example, if a satellite licensed by Country X wants to serve the U.S. market, the first step in applying our ECO-Sat test will be to determine whether U.S.-licensed satellites may provide analogous services to, from, and within Country X. If the answer is no, then we will ordinarily deny an application to access the Country X satellite, unless there are countervailing public interest factors that counsel a different result.

23. There are three reasons for treating the licensing administration as the "home market" for ECO-Sat purposes. First, in most cases the licensing administration will lie within the footprint of the non-U.S. satellite for which U.S. market access is sought. As we have noted above, if a satellite system from Country X could serve the U.S. market but a U.S. satellite system could not serve Country X, then the Country X satellite could gain an unfair competitive advantage in the U.S. market by virtue of its unique ability to serve both geographic markets from the same earth station with a single uplink. While this advantage might not be decisive for some service offerings, we believe it would be significant enough in the majority of cases to distort competition within the United States.

24. Second, it is almost always true that the licensing administration has the most direct economic ties to the system in question. These ties will normally ensure that the licensing nation stands to benefit economically if its system is permitted access to the U.S. market. In our view, any country reaping these benefits from the provision of satellite services to, from, or within the United States should grant similar competitive opportunities to U.S.-licensed satellites. Moreover, the substantial identity of economic interest between any system and its licensing administration make it likely that this "home market" standard will be the most successful strategy for carrying out our statutory authority under Section 308(c) of the Communications Act. Although it is of course possible for any system to have substantial investment from outside the licensing administration, we do not expect this phenomenon to be common enough in the foreseeable future to justify a departure from the highly predictable and administratively simple rule we propose.

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<sup>32</sup> The intergovernmental satellite organizations, such as Intelsat or Inmarsat, are the only exception to this general rule. This exceptional case is specifically addressed in section III.F, infra.

25. Third, there is a direct connection between a satellite's coverage area and the difficulties of coordinating the satellite internationally. This is especially true for MSS services, since coverage area in that service affects overall traffic and therefore spectrum demands. As we discuss below, the licensing administration will be of utmost importance in these coordination discussions, and we therefore believe it is appropriate to focus very carefully on that administration in determining the extent of service that will be permitted in the United States.

26. However, this "home market" inquiry is, by itself, insufficient in two respects. First, there may in some cases be administrations other than the coordinating administration for ITU purposes that will derive significant benefits from any unfair advantage a particular non-U.S. system might enjoy over U.S. systems. Thus, if we were to look only at a non-U.S. satellite's "home market," then satellite operators from relatively closed national markets might seek to obtain their spectrum and orbital assignments from an "administration of convenience," i.e., an administration with which the operator has few other connections but which has a market that is much more open than the one that would be more "naturally" associated with the investors in the non-U.S. system. Second, the "home market" approach to ECO-Sat does not, by itself, reflect the inherently regional if not global nature of satellite communications. Each satellite typically covers many different countries, and a satellite's point-to-multipoint capability makes it possible (indeed common) for the same satellite to be used simultaneously for transmissions within the United States, transmissions from the United States to other countries, and transmissions from other countries to the United States (as well as transmissions that do not involve the United States at all). Because some countries may offer landing rights to satellites from some foreign countries but not others, U.S. satellites may have opportunities to compete on some of these "routes" but not others. If we were to make an all-or-nothing, in-or-out decision on market access for a non-U.S. system based solely on the openness of that system's home market, then we would leave open the possibility that the non-U.S. satellite, once it entered the U.S. market, might be able to serve some "routes" on which U.S. satellites are prevented from competing. This result would distort competition for users in the United States, and would have a particularly damaging effect if the home market were an administration of convenience.

27. We therefore tentatively conclude that our ECO-Sat analysis must examine not only the openness of a non-U.S. satellite's home market, but also the openness of some or all of the "route markets" -- those in which a transmission originates or terminates -- that the non-U.S. satellite proposes to serve from the earth station(s) we are asked to license. One approach would be to examine all these "route markets." Thus, if a satellite system licensed by Country X wanted to provide service between the United States and Countries Y and Z, then we would apply our ECO-Sat test to determine whether U.S. satellites could serve Countries X, Y, and Z. If Countries X and Y permitted service by U.S. satellites but country Z did not, then in the absence of countervailing public interest factors, the earth station license(s) we granted would permit service to and from Country Y, but not to and from Country Z. This limitation on authorized service would prevent non-U.S. systems from capitalizing on "special concessions" of the type we prohibit our own licensees from acquiring or enjoying.<sup>33</sup>

28. The merit of our route market proposal may depend in part upon our practical ability to prevent and/or detect reorigination of traffic over satellite networks -- and even terrestrial networks to a lesser extent. It may be ineffective, for example, to prohibit a Country X satellite from serving

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See note 21 supra.

Country Z from the U.S., if we cannot prevent the service provider from landing a U.S.-originated signal in Country Y and then carrying the signal by terrestrial means into Country Z. On the other hand, as long as U.S. satellites have effective competitive opportunities in Country Y, such an arrangement may not injure competition in the U.S. satellite market. More troublesome, perhaps, is the difficulty of enforcing such restrictions in a truly point-to-multipoint context, such as the simultaneous distribution of video programming to cable headends in a number of countries, some of which cannot be served by U.S. satellites. We specifically seek comment on whether the selectivity required by the route market prong of ECO-Sat is technically feasible, whether we can effectively enforce it using our jurisdiction over the U.S. earth station operator, and whether this enforcement question affects all services equally or is more problematic for some.

29. This second prong of the ECO-Sat test differs in important ways from the approach we adopted in our Foreign Carrier Entry Order. There, our examination of particular routes was driven by considerations of market power, and we concluded that foreign-affiliated carriers could generally only distort competition in the U.S. with respect to routes on which they possessed dominant market power. However, it is important to note that one or more U.S. telecommunication carriers already have operating agreements for service to virtually every country on Earth. That is not true for satellite services, where U.S. operators are simply barred from entering many markets. Only Intelsat has achieved a level of market access that is at all comparable to that achieved by the major telecommunication carriers, and indeed, Intelsat will be the dominant system on nearly all routes for some time to come. This critical distinction between the respective industries leads us to depart from our Foreign Carrier approach and propose to examine all routes, not just those on which the non-U.S. system has dominant market power.

30. There are a number of variations on our basic two-pronged framework on which we also seek comment. For example, we could base our "home market" inquiry on ownership, in addition to looking at the coordinating administration for ITU purposes. An ownership-based approach might look at the markets from which all investors hail; or the markets from which some subset of investors hail, such as all investors with more than a threshold level of ownership. Similarly, the "route market" prong of our framework could examine only a subset of all the routes on which service over the non-U.S. satellite is proposed. For example, we could look at all route markets whose nationals are investors; or all whose nationals are major investors (above a specified ownership threshold). We could look at all route markets that exceed a specified threshold of economic significance, based on traffic volume or population or some other criterion. We seek comment on all of these variations on the basic two-pronged framework.

31. Alternatively, we could adopt a somewhat different basic framework -- a one-step analysis in which we look at a much larger group of markets to decide the market entry question, but thereafter impose no restriction on the markets the U.S. earth station may serve over the non-U.S. satellite. Under such an approach, we could require that some "critical mass" of relevant countries permit competition from U.S. satellites before the non-U.S. satellite would be permitted to serve the U.S. market. For example, an earth station applicant seeking to use a non-U.S. satellite for service to countries A through Z might be permitted to serve all twenty-six destinations if, on balance, the number of these countries open to U.S. satellites was high enough to support the conclusion that no adverse competitive effects would result from permitting service over the non-U.S. satellite in the United States. This approach, however, raises difficult questions about exactly which countries are relevant and how "critical mass" can be defined to an acceptable level of regulatory certainty. We

are also concerned that the "all or nothing" characteristics of such an approach might result in less competition on routes that are open to U.S. satellites, based on the fact that other markets are closed. For these reasons, we tentatively conclude that the two-pronged framework better fits the majority of satellite services (with the notable exception of mobile satellite services, discussed below). We seek comment, however, on this alternative as well.

32. In summary, we propose a two-pronged ECO-Sat test under which we examine effective competitive opportunities for U.S. satellites in (1) the home market of the non-U.S. satellite in question; and (2) all route markets which the applicant proposes to serve from a U.S. earth station. We believe this approach will permit us to offer non-U.S. satellites the ability to serve the U.S. market on an equal footing with U.S. satellites, thus preventing any competitive distortions and facilitating greater market access for all systems worldwide. We seek comment on this approach and on the alternatives discussed herein.

### 3. Identifying the Appropriate Service Categories for Comparison

33. In determining whether a foreign country meets the ECO-Sat test, we may often find that a particular country permits U.S. satellites to provide some but not all satellite services. In general, we believe the public interest would be best served by permitting satellites licensed by such a country to enter the U.S. market for those services that can be competitively offered abroad by U.S. satellites, but not for other satellite services. We therefore propose to focus our ECO-Sat test on the specific service that the non-U.S. system seeks to provide to, from, or within the United States and determine whether U.S. satellite systems would be permitted to provide the same type of service to, from, or within the foreign country. For example, if a content provider (or satellite operator) in Country X wanted to provide DTH service in the United States using a non-U.S. satellite, our ECO-Sat analysis of the blanket earth station license application for that service would focus on whether a U.S. satellite could be used to provide DTH in Country X. We would not ordinarily consider, for example, whether Country X permits U.S. FSS operators to serve Very Small Aperture Terminals ("VSATs") in Country X.

34. The available types of satellite services continue to multiply, and any lines of demarcation between service categories may be inherently both provisional and uncertain. In the interest of providing general guidance, however, we propose a "rule of thumb" based on the following service categories: DTH (including true DBS service), FSS, and MSS. We do not propose to distinguish VSAT service from FSS or divide service categories for FSS and MSS into voice, video, or data. However, if other countries draw such distinctions when allowing U.S. satellites to provide service, we may consider such distinctions when satellite systems licensed by those countries seek access to the U.S. market. Similarly, we recognize that in some jurisdictions U.S. satellites may have landing rights yet they may be prohibited from interconnecting with the Public Switched Network ("PSN"). We propose to take account of this possibility by identifying PSN interconnection as a valid basis for conditioning or even denying a non-U.S. system's access to the U.S. market. As technology and customer needs change, we expect it may be necessary in the future to modify our approach to reflect the evolving marketplace. We ask for comments on the proposed service-by-service approach.

35. In evaluating each service category, we do not propose any rigid distinction between international and domestic service. We no longer make this distinction in regulating U.S. satellite

operators,<sup>34</sup> and we therefore see no reason to impose it on non-U.S. satellites entering our market. We recognize, however, that some countries still observe such a distinction, and this may affect the scope of U.S. satellite opportunities for effective competition abroad. If, for example, the home market of a non-U.S. satellite permits U.S. satellites to offer international but not domestic service, it might be appropriate to permit that satellite to provide international but not domestic service in the United States, depending on the service involved and perhaps in some cases the relative economic significance of domestic and international service. On the other hand, precisely because we now regulate the U.S. market without regard to whether the service is international or domestic, we expect that such a partitioning of the market will not generally be in the public interest, and that both types of service should be open to U.S. satellite operators before the ECO-Sat test is satisfied.

36. By applying a service-by-service approach, we seek to promote fair competition in each submarket for satellite services. We also hope to expand competition in the United States as soon as other countries undertake even an incremental opening of their markets. This approach will provide certainty to potential applicants by clearly indicating the basis on which non-U.S. satellite systems can provide a particular service in the U.S. market. In addition, it will give satellite users in the United States the benefits of increased competition as soon as possible and to the maximum extent possible without market distortions. We ask for comments on all aspects of this proposed service-by-service approach.

#### 4. Elements of the ECO-Sat Test

37. Under our proposed ECO-Sat test, we will examine both: (1) *de jure* or legal constraints that limit or prevent access to U.S. satellite systems in foreign markets; and (2) *de facto* constraints that limit or prevent such access.

38. The first element of the ECO-Sat test would require us to determine whether U.S. satellite systems are prohibited by law or regulation from competing with other satellite systems to provide service in a foreign market. If they are, then we would conclude that no U.S. satellite opportunities for competition exist in that foreign market. Consequently, if there is a law or regulation prohibiting U.S. satellite systems from providing satellite service in a foreign country, we would prohibit a satellite system licensed by that country from serving the U.S. market, unless there is a compelling public interest reason to do otherwise.

39. We believe that applicants wishing to communicate over non-U.S. satellite systems should bear the burden of demonstrating that none of the countries they intend to serve from the U.S. earth station maintain *de jure* barriers to entry by U.S.-licensed satellite operators. To assist applicants in carrying this burden, we propose to require all U.S.-licensed satellite operators to inform us in writing of all foreign destinations where they are permitted to provide service, as well as a general description of the services they are permitted to provide. This information could be submitted annually or semi-annually by all licensees, or each licensee could notify us whenever it obtains access to an additional foreign market. The International Bureau could then compile this information and release only an aggregate list of all destinations served by at least one U.S.-licensed space station, together with the services provided over U.S.-licensed space stations in those destinations. The appearance of any particular country on this list would be *prima facie* evidence that no *de jure*

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<sup>34</sup> See DISCO I.

restrictions unfairly prevent U.S. satellites from providing the relevant service in that market. We solicit comment on the least burdensome way to collect this information and the best way to address any concerns about confidentiality.

40. Under the second element of the ECO-Sat test, we propose to evaluate whether there are sufficient *de facto* constraints on the provision of service by U.S. satellite systems to deny them effective competitive opportunities in the relevant foreign market. If there are, we would conclude that U.S. satellite operators have no effective opportunities for competition in that foreign market. Therefore, we propose to deny authorization of the non-U.S. satellite system licensed in a market where *de facto* constraints exist, absent compelling public interest reasons that require a different result. Our focus on fair, vigorous competition is not satisfied by a government policy that allows a competitor to enter its satellite service market, yet erects obstacles that prevent such competition from being effective as a practical matter. Elimination of *de facto* barriers is critical for the development of an effective competitive market, particularly in countries where one system is dominant. We seek comment on this proposal.

41. We believe our focus on the realities of the marketplace requires a flexible standard for evaluating *de facto* barriers. Although we do not propose a specific "checklist" of impermissible *de facto* barriers, we believe it would be relevant to inquire into the existence of a fair and transparent regulatory framework for satellite services in the foreign country; the extent of separation between the foreign regulator and any incumbent non-U.S. satellite system; the implementation of safeguards to eliminate any competitive advantages that might be conferred by government ownership or subsidization of the non-U.S. satellite system; and the practical ability to use any dedicated earth stations associated with a particular system.<sup>35</sup> For some services, content restrictions may also be relevant. In order for U.S. satellite systems to be able to compete in a foreign market, there must be no competitive advantage bestowed on the satellite systems licensed by the foreign country through government regulatory policies. We seek comment on these and any other *de facto* barriers commonly faced by satellite systems that seek access outside their home markets.

42. Because we propose no exhaustive list of *de facto* barriers, it would be inappropriate to require users who wish to access non-U.S. systems to bear the burden of demonstrating that no such barriers exist in the countries with which their U.S. earth station will communicate. Instead, we propose to place that burden on the party, if any, that opposes market entry for the non-U.S. system.

43. We request comment on all aspects of the ECO-Sat test including any additional factors that should be considered and whether the test will achieve the objective of promoting competition and opening satellite service markets in the United States and the world. We also seek comment on whether, if we adopt a route market prong as described above, we should expand the "no special concessions" condition that we customarily impose on U.S. space station licensees in order to prohibit them from acquiring or enjoying special arrangements that unfairly disadvantage any competing satellite operator, whether licensed by the U.S. or by another administration, for reasons other than spectrum scarcity.

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<sup>35</sup> In Foreign Carrier Entry Order, we were able to draw on extensive experience to identify specific types of market barriers and competitive safeguards in non-U.S. markets. Here, however, we have much less experience, and prefer to state our test in general and flexible terms until we are confident in our ability to specify *de facto* barriers without omitting some.



5. Modified Application of the ECO-Sat Test to MSS or Other Services

44. The test proposed in this Notice has been crafted so that it can be applied to all satellite services we currently license. Since all satellite communications involve not only a space station but an earth station as well, we have focused on earth station applications as the procedural vehicle for implementing our procompetitive policy, and we expect this focus to be effective for most satellite services. Specifically, whenever a particular service must either originate or terminate with a transmission to or from an earth station within the United States, the Commission's jurisdiction over the earth station licensee should ensure that only authorized services are provided over any non-U.S. space station with which the earth station is authorized to communicate.

45. We are aware, however, that this basic approach may not be adaptable to all satellite services now or in the future. Voice service over an MSS system, for example, will often involve a transmission between a handheld, mobile earth station at one end and a user on the Public Switched Network at the other. Although a commercial earth station must handle an uplink or downlink at some point in the delivery of the call, either the handheld earth station, the commercial earth station, or both may be outside the jurisdiction of the United States. For example, a call from an office in Ohio to a non-U.S. MSS system handset in the Himalayas could travel by landline to Asia before any radio communication takes place. Such a call requires no earth station authorization in the U.S., and thus if the ECO-Sat test applies only to earth station applications, then such a call may be completed even if the Himalayan market in question is tightly closed as a matter of law to U.S. MSS providers.

46. This scenario is virtually certain to occur for at least some MSS systems, and it raises a number of questions. Can MSS be regulated under the same legal framework we propose for other satellite services? Should we attempt to regulate MSS communications to or from the United States to the extent that they do not involve radio communications within our borders? If such regulation would be in the public interest, what legal mechanism would best accomplish that goal? For example, could we apply some or all of the ECO-Sat test to Section 214 applications to provide international MSS on non-U.S. satellites? Even if some regulatory mechanism can be found that would enable us to apply the ECO-Sat test to an outgoing landline call to an MSS handset, is it technically feasible to regulate a call from the Himalayan handset back to a landline number in Ohio? Does it matter whether global MSS systems are assigned individual "country codes"? If we cannot design a market entry standard that applies to the landline portion of MSS calls, does that eviscerate the effectiveness of our policy with respect to MSS, or is the ability to use handsets or locate earth stations in the U.S. of such critical importance to MSS systems that our policy may still succeed in promoting fair competition here and open market access abroad?

47. Our tentative conclusion is that we should not attempt to extend our regulation of MSS services beyond earth station licensing. Instead, we are inclined to deal with MSS market access issues through simultaneous evaluation of effective competitive opportunities for MSS providers on a global or regional basis. Under such an approach, we would require that some "critical mass" of foreign markets be open to U.S. satellite operators before a non-U.S. MSS system could provide any service in the United States. We seek comment on this tentative conclusion, and on how to define the requisite "critical mass" so as to combine the flexibility that is necessary for intelligent regulation with the certainty that is necessary for effective competition. We also ask whether any other satellite services should be governed by a more specialized approach to the question of market entry for non-U.S. satellite systems. We seek comment on all of these issues.

D. Consideration of Additional Public Interest Factors

48. Once we have applied the ECO-Sat test, we propose to examine other factors that bear on whether grant of the application is in the public interest, convenience, and necessity, consistent with Section 303(r) of the Act. Our public interest analysis would include factors such as the general significance of the proposed entry to the promotion of competition in the United States and the global satellite service market; issues of national security, law enforcement, foreign policy, and trade on which we would defer to the Executive Branch); and spectrum availability and coordination. While most of these factors are familiar from other contexts,<sup>36</sup> the spectrum availability and coordination considerations deserve special discussion.

49. For example, we propose to consider whether the licensing country of the non-U.S. satellite system will coordinate the spectrum for its system(s) with U.S. satellite systems (and with the rest of the world for non-geostationary systems) in good faith. Because we lack the power to order a non-U.S. space station to cease operating or otherwise remedy harmful interference, it is essential that we have a working relationship of trust with the coordinating administration of each non-U.S. space station to which we grant access. We are particularly concerned about non-geostationary systems because the same systems will be using the same spectrum to provide service throughout the world. Therefore it is important that foreign licensing administrations coordinate spectrum with us to serve the U.S. and other markets throughout the world in good faith.

50. In addition, we may sometimes be faced with greater spectrum demand than we can accommodate. If there is sufficient spectrum to accommodate only a few systems, for a particular service or in a particular portion of the spectrum, the Commission will not be able to offer access to all non-U.S. systems any more than it can license all U.S. applicants. In assigning scarce frequencies we propose to treat non-U.S. systems that pass the ECO-Sat test as we would U.S.-licensed systems. We request comment on this proposal.

51. In considering spectrum availability and coordination, we also propose to consider as part of our public interest analysis whether the technology and spectrum available will support additional systems in the U.S. market. The technology available for some services may permit only one or very few satellite systems to serve the same geographic area over the same frequencies. In reviewing applications, there may be instances where there is insufficient spectrum to support competing U.S. and non-U.S. satellite systems to serve the United States.<sup>37</sup> We recognize that efforts to coordinate spectrum may potentially be hindered if we authorize a non-U.S. satellite system, competing for the same spectrum, to serve the United States prior to completion of spectrum coordination. In situations where the United States and other administrations are engaged in coordination of spectrum covering the United States, we propose to consider the effect that any authorization of service would likely have on spectrum coordination efforts. We seek comment on this proposal and mechanisms that could be implemented to facilitate fair competition.

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<sup>36</sup> See Foreign Carrier Entry Order.

<sup>37</sup> Similarly, we recognize that in foreign jurisdictions, spectrum issues may impinge upon the possibility of permitting market entry to U.S. operators.

## E. Other Technical and Legal Requirements

52. Since the Commission licensed the first U.S. satellite system more than two decades ago, we have sought to ensure the efficient use of the orbit/spectrum resource. Consequently, as the industry has evolved, we have adopted technical and legal requirements for each satellite service that permit the maximum number of systems to operate and prevent warehousing of scarce and valuable public resources. For example, in 1983, we adopted a policy that reduced orbital spacing from three and four degrees to two degrees between domestic fixed satellites.<sup>38</sup> To ensure that these more closely-spaced systems would not interfere with each other, we established technical requirements for earth stations, such as power density limits, bandwidth limits, antenna pattern requirements, and limitations on the minimum size of earth station antennas for routine licensing. In adopting closer satellite spacing, we found that the benefits to be derived from the additional in-orbit satellites outweighed the costs of implementing this policy, such as installing new earth stations to meet new performance criteria.

53. In light of our continuing goal to promote fair and effective competition, it is critical that any foreign systems serving the U.S. market comply with the legal and technical requirements imposed on U.S.-licensed systems. Otherwise market entry by non-U.S. systems would distort our competitive policies, disadvantage U.S. satellite operators and service providers, and jeopardize our spectrum management policies.

### 1. Technical Considerations

54. In order to diminish interference among systems while allowing maximum use of spectrum and orbital locations, we propose to require all non-U.S. satellite operators seeking to provide international and domestic service in the U.S. market to meet the technical requirements applied to U.S. operators. These requirements are contained in Part 25 of the Commission's rules and Commission orders.

55. Part 25, for example, contains rules regarding the minimum size of fixed earth station antennas operating in the 4/6 GHz band ("C-band") and the 12/14 GHz band ("Ku-band"). The rules currently specify that C-band antennas must be at least 4.1 meters in equivalent diameter, while Ku-band antennas must be 1.2 meters.<sup>39</sup> These rules were needed to implement the Commission's two-degree spacing policy, since a two-degree spacing environment requires larger antennas than a three- or four-degree spacing environment. Even though we "phased in" our two-degree spacing policy, affecting some U.S. satellites sooner than others, we immediately applied this policy to *all* new antennas. We did this to ensure that, in the transition to two-degree spacing, those operators that were required to operate at the smaller spacing sooner than others would not be disadvantaged with customers, who generally prefer smaller antennas. For similar reasons, we now propose to apply our antenna size requirements to *all* C-band and Ku-band earth stations in the U.S., regardless of whether they are communicating with U.S. or non-U.S. space stations, including Intelsat space stations.

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<sup>38</sup> Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations, Report and Order, 54 R.R.2d 577 (1983).

<sup>39</sup> See 47 C.F.R. § 25.134.

56. In addition, we propose to prohibit earth stations from accepting, from non-U.S. space stations, transmissions with power limits above those required for U.S. space stations operating in accordance with our two-degree spacing policy. For example, to be routinely licensed for VSAT service in the Ku-band, an earth station cannot receive transmissions with e.i.r.p. densities greater than +6 dBw/4 kHz. Also, they cannot send transmissions with power densities greater than -14 dBw/4 kHz. The power of a down-link transmission can be limited by controlling the power of the corresponding up-link transmission. Therefore, when providing international service via a non-U.S. space station, U.S. earth station operators receiving transmissions will have to coordinate the power of the transmissions with the foreign earth station operator to ensure that the transmission does not exceed acceptable power limits. We recognize that the power limit on a transmission may also be controlled by the space station and expect that such action may, at times, be necessary.

57. In the future, if technology or other public interest factors allow the use of earth stations with smaller antenna sizes, we will consider changing our rules for all satellite systems serving the United States, regardless of which administration licenses the space stations. We ask for comment on requiring non-U.S. satellite systems operating in all frequency bands to adhere to all technical rules and policies applied to U.S. satellites.

## 2. Foreign Ownership

58. In order to provide service as a U.S. licensee, space stations, transmitting earth stations, and receive-only earth stations operating with non-U.S. satellite systems or receiving signals originating from other countries must currently obtain a license pursuant to Title III of the Act.<sup>40</sup> In addition to obtaining a license under Title III of the Act, providers of international common carrier services must obtain separate Section 214 authority in accordance with Title II of the Act. No Section 214 authority is required for non-common carrier satellite services. However, Section 310(a) of the Communications Act of 1934<sup>41</sup> mandates that no foreign government or representative thereof may obtain an earth or space station license. Section 310(b) of the Act imposes other foreign ownership limits specifically on broadcast, common carrier, and aeronautical earth and space station licenses.<sup>42</sup>

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<sup>40</sup> To the extent an applicant seeks to provide non-satellite based international common carrier service pursuant to Section 214, it is potentially subject to the effective competitive opportunities analysis under our Foreign Carrier Entry Order.

<sup>41</sup> 47 U.S.C. § 310(a) (stating that "[t]he station license required under this Act shall not be granted to or held by any foreign government or the representative thereof").

<sup>42</sup> 47 U.S.C. § 310(b) (stating that "no broadcast or common carrier or aeronautical en route or aeronautical fixed radio station license shall be granted to or held by -- (1) any alien or the representative of any alien; (2) any corporation organized under the laws of any foreign government; (3) any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country; (4) any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license").

In the past, under certain circumstances, the Commission has exercised its discretion to permit foreign ownership in excess of the limits set forth in Section 310(b)(4).<sup>43</sup>

59. We do not propose to require a non-U.S. satellite system that is already licensed or is pursuing a license in another administration to obtain a Title III license for its space station. Nor do we propose to require that the owners of the non-U.S. system hold the Title III licenses we issue for the earth stations that communicate with that system. As a result, non-U.S. satellite systems, regardless of the level of foreign investment, can obtain access to the U.S. market by operating with U.S.-licensed earth stations in accordance with the present rules. Therefore, Section 310 will not require us to address issues of foreign ownership regarding non-U.S. space stations that seek access to the U.S. market. We seek comment on these and any additional foreign investment issues that we should consider in promulgating our rules.

### 3. Changes to Earth Station Application Form

60. We also seek comment on what changes we should make to FCC Form 493 (Application for Earth Station Authorization or for Modification of Station License) in order to ensure that an earth station application involving a non-U.S. satellite system provides sufficient information to enable us to apply the ECO-Sat test.<sup>44</sup> For example, we might modify FCC Form 493 to include items regarding the type of satellite service the applicant seeks to provide and the country in which the non-U.S. satellite system is licensed or will be licensed. To apply the ECO-Sat analysis, we might also need to know the ownership structure of the non-U.S. satellite and all countries in which signals carried over the earth station will originate or terminate. The form might also reference the applicant's need to attach, as part of its public interest showing, an exhibit demonstrating that U.S. satellite operators face no *de jure* entry barriers in the relevant home and route markets. As noted above, we propose that the applicant bear the burden on the issue of *de jure* barriers.

61. In addition, we seek comment on the need to obtain and evaluate certain other information concerning the non-U.S. satellite system. We believe an earth station applicant who wishes to access a non-U.S. satellite should demonstrate that the non-U.S. satellite meets all Commission technical, financial, and legal requirements for that service.<sup>45</sup> We believe such a showing is necessary if we are to ensure that the non-U.S. satellite will be able to provide service in a

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<sup>43</sup> See, e.g., C & W, Inc., 10 F.C.C. Rcd. 3177 (1995); BT/MCI, 9 F.C.C. Rcd. 3960 (1994); Teleport Transmission Holdings, 8 F.C.C. Rcd. 3063 (1993); GCI Liquidating Trust, 7 F.C.C. Rcd. 7641 (1992); IDB Communications Group, Inc., 6 F.C.C. Rcd. 4652 (1991); MMM Holdings, Inc., 4 F.C.C. Rcd. 8243 (1989)

<sup>44</sup> We have proposed to adopt Form 312 (Application for Satellite Space and Earth Station Authorizations) to replace a number of forms including Form 493. If adopted, we propose to amend Form 312 accordingly. See Streamlining the Commission's Rules and Regulations for Satellite Application and Licensing Procedures, Notice of Proposed Rulemaking, 10 F.C.C. Rcd. 10624 (1995).

<sup>45</sup> Earth station applicants should pay the fee for transmit/receive or receive-only earth station applications as is appropriate. We emphasize that the non-U.S. system must only meet the applicable standards for that service in the United States. DBS service, for example, has no financial qualification requirement, so under our proposal we would not apply any financial qualification requirement to a non-U.S. operator seeking to enter the U.S. market.

timely manner and without interference to U.S. satellite systems. The earth station applicant must therefore file an exhibit to its application containing the same information that must be submitted by a U.S. space station applicant in accordance with Part 25 of the Commission's rules. We ask for comments on whether any additional changes should be made to the earth station application form.

F. Intergovernmental Organizations ("IGOs") and Affiliated Companies

62. By virtue of the Communications Satellite Act of 1962<sup>46</sup> and the 1978 International Maritime Satellite Telecommunications Act,<sup>47</sup> Comsat, as the U.S. Signatory to Intelsat and Inmarsat, holds the statutory right to provide Intelsat and Inmarsat space segment capacity to users in the United States. Intelsat and Inmarsat are treaty-based, intergovernmental organizations ("IGOs") designed to ensure world-wide satellite communications.<sup>48</sup> These organizations have certain privileges and immunities that may provide them with competitive advantages over competing satellite service providers. For example, they hold tax free status and may be exempt from national regulations, and competition laws. They also have established dominant positions in the global market by virtue of their size and of the fact that, in general, their members are the primary if not exclusive providers of fixed and mobile maritime services in most major national markets. As such, we asked in the DISCO I Notice how we should treat requests to provide domestic service via Intelsat and Inmarsat.

63. The commenters in DISCO I argued that the privileges and immunities available to Intelsat and Inmarsat could give Comsat an unfair competitive advantage in the U.S. market and recommended that Comsat not be permitted to serve the U.S. domestic market prior to a restructuring of Intelsat and Inmarsat.<sup>49</sup> We determined that these issues would best be addressed in the context of a review of Commission policies concerning whether and under what conditions we will permit the use of non-U.S. satellites to serve the U.S. market.

64. Intergovernmental satellite organizations present at least three analytical problems within the framework we propose. First, these organizations do not have a single "home" market in the same sense that a private or even a strictly national satellite operator does. This fact makes it unclear what type of analysis we should conduct in order to determine whether, for example, Intelsat or Inmarsat should be permitted to provide purely domestic service in the United States. Second, intergovernmental satellite organizations already serve virtually every country from the United States. Indeed, they were created to provide ubiquitous service. This fact may make it inappropriate ever to apply the route market portion analysis discussed above to an application involving an IGO. Finally,

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<sup>46</sup> 47 U.S.C. §§ 701-744.

<sup>47</sup> 47 U.S.C. §§ 751-757.

<sup>48</sup> The International Telecommunications Satellite Organization (Intelsat) operates a global system which provides fixed satellite service for voice, data, video, and audio communications. The International Mobile Satellite Organization (Inmarsat), which provides global maritime and aeronautical mobile satellite communications services, has for several years been in the process of amending its Agreement in order to provide land mobile satellite services.

<sup>49</sup> See Comments of Orion Network Systems, Inc. at 4 (filed June 8, 1995); Comments of AT&T Corp. at 16 (filed June 8, 1995); and Comments of Columbia Communications Corporation at 6 (filed June 8, 1995).

Inmarsat has already created a private affiliate to provide newer commercial services, and both Inmarsat and Intelsat are considering the option of spinning off additional subsidiaries. Although private as a matter of form, these affiliates have a treaty-based heritage and may continue to have at least some governmental ownership. These features could result in privileged access to national markets around the world and diminish effective competition in the U.S. market. It is therefore a fair question whether these organizations should be treated as intergovernmental or private. We discuss each of these three questions in detail below.

1. Domestic U.S. Service via Intergovernmental Satellite Organizations

65. As explained above, our ECO-Sat test ordinarily begins with an analysis of U.S. satellite opportunities for competition in the home market of whatever non-U.S. system seeks access to the U.S. market. Intelsat and Inmarsat are headquartered in the United States and the United Kingdom, respectively, and the United States and United Kingdom forward these organizations' space station information to the ITU for registration and coordination purposes. However, the highest authority in each organization is an Assembly of "Parties," or national governments. At the time of this Notice, 136 national governments are members of Intelsat and 78 are members of Inmarsat. For this reason, we tentatively conclude that it would be unrealistic to treat the United States or the United Kingdom, respectively, as the "home market" of either intergovernmental organization for purposes of our ECO-Sat analysis. Indeed, we further conclude that it would be unrealistic to treat any single nation as the home market of an intergovernmental satellite organization.

66. One alternative is to base access to the U.S. domestic market on the openness of all the various route markets served by the intergovernmental organization -- or at least all the markets of the organization's members. This approach could, however, unduly and perhaps unfairly restrict service from Intelsat, Inmarsat, or another IGO on the basis of market barriers in what may be a small number of nations. Attributing such national market barriers to the supranational organization would be appropriate only if the national market barriers were so pervasive as to constitute to some extent the consensus position of the entire organization.

67. Another alternative to the aggregation of these sometimes conflicting national policies might be based upon the minimum level of concurrence that is required for any official action of the organization. Article XVII(d)(i) of Intelsat Agreement, for example, requires approval by two-thirds of the Parties representing two-thirds of the organization's total investment shares to amend the Agreement.<sup>50</sup> We could conceivably incorporate this standard into a rule that U.S. earth stations would be permitted to provide U.S. domestic service over Intelsat if two-thirds of Intelsat's member countries, representing two-thirds of the organization's total investment shares on the date of application, permitted U.S. satellites to provide analogous services in their markets. Analogous rules could be adopted for each IGO.

68. A final alternative might be to apply a much less structured standard that focuses directly on the competitive consequences of an IGO providing domestic service within the United States. Under such an approach, the Commission could simply ask whether the IGO, in light of its

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<sup>50</sup> See Article XVII(d) of the Agreement Relating to the International Telecommunications Satellite Organization (Intelsat). Article 34(2) of the Convention on the International Maritime Satellite Organization (Inmarsat) contains a similar requirement.

intergovernmental status and global dominance, would be in a position to diminish effective competition in the United States. This approach would provide a high degree of flexibility, but might not provide sufficient guidance to interested parties. We request comment on all these proposals, as well as the submission of other alternatives.

## 2. Application of the ECO-Sat Route Market Analysis

69. We have already stated that we do not intend generally to apply the standard we propose today to existing authorizations or to earth station applications that are already pending. Whatever standard we adopt for the intergovernmental satellite organizations should also apply only prospectively. In the case of Intelsat and Inmarsat, that means that virtually every market in the world is already served from the United States. However, it would be theoretically possible to apply the route market portion of our ECO-Sat test to Comsat and other prospective earth station operators of the intergovernmental organizations as they file their earth station applications for expanded Intelsat or Inmarsat services. That, indeed, might be the most forceful way to promote competition in all markets around the world.

70. However, we have serious doubts that such an approach would be consistent with the statutes governing U.S. participation in Intelsat and Inmarsat,<sup>51</sup> and we tentatively conclude that it would not be in the public interest. There are still many nations in the world that are connected to the United States only by satellite, and any policy that makes it more difficult to reach these points over Intelsat would unduly constrain the already limited service to these points. Similarly, Inmarsat remains the only two-way satellite communications system recognized today by the International Maritime Organization as a Global Maritime Distress and Safety System provider, and we believe international service over Inmarsat should remain robust until global maritime distress and safety services are provided by multiple private systems. We therefore propose to continue licensing international communications over the Intelsat and Inmarsat systems without application of the ECO-Sat test. We also seek comment on what our policy should be toward intergovernmental organizations other than Intelsat and Inmarsat.

## 3. Regulatory Treatment of the Intergovernmental Organizations' Subsidiaries, Affiliates, or Successors

71. Both Intelsat and Inmarsat are currently studying various restructuring proposals to streamline the organizations and enable them to respond to competitive pressures better and faster. Their desire to become more efficient is understandable, since the decisionmaking process in an IGO is inherently less dynamic than in private industry. However, if IGOs are to provide services in competitive markets, they cannot be permitted to leverage the benefits of their intergovernmental status to unfairly distort competition. For this reason, the U.S. government has generally supported privatization efforts that would enhance competition worldwide, but not privatization for its own sake. To date, both Inmarsat and Intelsat have rejected outright privatization, opting instead for the creation of private subsidiaries or affiliates to provide defined services. ICO Global Communications is the

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<sup>51</sup> See Communications Satellite Act of 1962, 47 U.S.C. § 701; International Maritime Satellite Telecommunications Act, 47 U.S.C. § 753(c)(3)(A).



first such affiliate and the extent to which it is truly independent of Inmarsat is currently the subject of another proceeding.<sup>52</sup>

72. Since structural change is supported, albeit in varying degrees, by many IGO members, some type of change is likely in the near to medium term. To the extent that the IGOs continue creating subsidiaries or affiliates, we will have to consider repeatedly whether the newly created entities should be permitted to provide service in the United States. Since we have proposed a somewhat different ECO-Sat analysis for IGOs than we have for other non-U.S. systems, we must determine what standard should apply to these newly created entities.

73. As a general matter, we believe that genuinely procompetitive privatization should result in a commensurate reduction in the burdens that go with intergovernmental status. Privatization that is only a matter of form should not. In order to maintain the flexibility necessary to resolve each case on its own facts, we tentatively conclude that IGO subsidiaries, affiliates, or successors should be treated just like any other non-U.S. systems that seek access to the U.S. market, with the understanding that public interest factors are likely to play an unusually important role in making these determinations. Thus, for example, in considering applications to operate within the U.S. using the space segment of an IGO affiliate, we will apply our normal ECO-Sat test to both the home and route markets of the affiliate, for each proposed service segment. We will then examine the usual public interest factors and the affiliate's independence from any IGO or its Signatories. Prominent in our public interest consideration will be any views expressed by the Executive Branch regarding the extent to which the affiliate's structure is consistent with U.S. policy. There will undoubtedly be other factors that should be considered in any particular case.

74. Although we do not intend to revisit existing authorizations to use Intelsat or Inmarsat, we do not believe that such authorizations should automatically transfer to these organizations' subsidiaries, affiliates, or successors. Thus, if space segment is transferred from an IGO to an affiliate, we propose to require affected earth station operators to request a license modification to reflect the transfer, in order to ensure that operation with the affiliate is consistent with U.S. policy. Obviously, the disruption that would be caused by terminating existing services would be an additional public interest factor to consider at that time. Moreover, we propose to apply the framework we announce today to new earth station applications to provide international service via an IGO affiliate and to applications seeking to provide domestic U.S. service via an IGO or IGO affiliate. We seek comment on these proposals.

#### G. Receive-Only Earth Stations

75. In light of the policies proposed in this Notice, we revisit a 1993 Commission proposal to eliminate licensing requirements and establish a voluntary registration program for receive-only earth stations in the fixed satellite service operating with Intelsat space stations, non-U.S.

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<sup>52</sup> Application of Comsat Corp. for Authority to Participate in the Procurement of Facilities of the I-CO Global Communications Limited System, File No. 106 SAT-MISC-95., Public Notice No. SPB-8 (May 10, 1995).